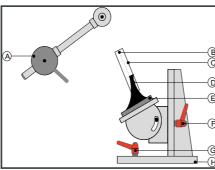


LABORATORY EQUIPMENTS

Heel fatigue tester

DESCRIPTION:

This test machine is used to provide a measure of the ability of the heels of women's shoes to withstand the repeated small impacts of normal walking. It is of a particular relevance to slender stiletto heels which are at greatest risk of fatigue breakage in wear.



Principle:

A free falling pendulum with a striker head (A) is activated by a motor system, so as to give the heel tip (D) a series of impacts of 0.68 Joules energy at the rate of one a second until failure occurs, or until it is apparent that the heel has satisfactory fatigue resistance.

During the test the pendulum falls from an approximately horizontal to an approximately vertical position. After each blow, the pendulum actuating system lifts the pendulum back to the starting position ready for the next blow.

The machine has an electronic counter to record the number of impacts and also can be pre-set to determine the maximum duration of the test, which normally chosen to be 20.000 impacts. An automatic cut-off system is incorporated so that, should the heel stem break, the pendulum overshoots and trips a microswitch which cuts off the motor and stops the counter (the total number of impacts is keeper recorded).

